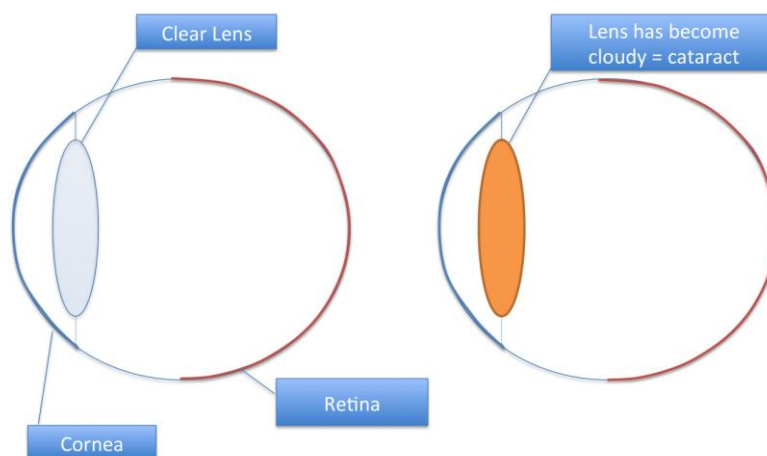


Cataract

Introduction

The eye functions in a similar fashion to a camera. The front part of the eye consists of the focusing mechanism. The back part of the eye captures the image like camera film or a digital display in more modern terms. The focusing mechanism at the front of the eye consists of the cornea and the lens. The cornea is the clear window in front of the coloured iris. The lens sits just behind the iris and helps to fine tune the focusing from the cornea, in much the same way as the focusing mechanism on a camera.

With increasing age and some medications, especially prednisolone, the lens in the eye can become cloudy. This is called a cataract. The cataract prevents clear, well-focused light from reaching the back layer of the eye, called the retina. As such, the eye is unable to generate clear, crisp images for the brain to view. (See diagram below).



Symptoms

The most common symptom is a progressive deterioration in vision that cannot be corrected by new glasses. It is often detected by a local optometrist when a patient complains of decreasing vision and assumes that it is time for the glasses to be updated.

Other symptoms include

- Glare
- Increasingly strong glasses are required

Examination Findings

An ophthalmologist will diagnose a cataract after a comprehensive examination of a patient's eye. It appears as opacity behind the pupil. It is important that the ophthalmologist examine all the other layers, including the cornea and retina, to ensure that there is no other cause for the decreased vision. Both eyes are examined and this is achieved with the use of dilating drops that enlarge the pupil for several hours.

Treatment

Cataracts are generally not a dangerous condition. They can be left alone and for the most part they will not cause any secondary problems. However, when a cataract is interfering with a patient's quality of life or ability to do tasks (such as driving), then it is worth considering treatment.

Treatment for cataract has progressed enormously in the last two decades. Most patients have a local anaesthetic around the eye whilst being given a light sedative medication. It is generally done as a 'day procedure' without an overnight stay in hospital. Microscopic incisions are made in the corners of the eye and a high frequency ultrasound device is used to break up the cataract. It is then removed in tiny fragments. Once the cataract is removed, a clear plastic lens is placed in the same position as the original cataract. The plastic lens looks much like a contact lens. It is designed to stay in the eye permanently.

All cataract treatment is surgical. Sometimes this surgery is assisted with LASER (high energy light) but even this technology still requires instruments to enter the eye to remove the cloudy lens.

Lens Types

There are numerous different types of lenses that can be implanted in a patient's eye. For the majority of patients, the aim is to provide the patient with clear vision for distance in both eyes. This allows the patient to do tasks such as driving, exercise and general tasks without the need for strong glasses. For close up activities such as reading, computer work and television, the patient may require 'near vision' glasses to help focus the light more precisely.

Some lenses can also correct 'astigmatism'. This is a condition where the cornea is not perfectly round. The lens can provide the exact opposite configuration so that a patient can sometimes be cured of their astigmatism.

There are some lenses on the market that offer patients a good level of vision across a range of distances. However these lenses are generally a compromise, as they may not provide as 'crisp' an image. These lenses are currently not available in public health facilities such as The Austin Hospital.

Glasses

Most patients will require some glasses after a cataract operation. This may be for driving or for near activities like reading. Our aim is to minimize the need for glasses for driving and walking.

Risks of Cataract Surgery

Cataract surgery is much safer than it ever has been. Every precaution is taken to minimize risk but it cannot be eliminated.

The potential risks of cataract surgery include

- A problem during the operation that requires a second operation.

- Damage to the eye from the operation or the anaesthetic.
- Infection occurs in 1 case per 1,000. This can sometimes be treated but in rare circumstances may lead to decreased vision or even eye removal.
- Loss of vision in the non-operative eye. This is extremely rare but is known to occur.

It is important that you discuss these risks with your ophthalmologist to decide if cataract surgery is right for you.